

MEDICAL OVERFLOW PROTECTION DEVICE

Abstract

A protective device that is used in a medical suction system withdrawing liquids from a patient. The device is located upstream of a vacuum regulator and protects that regulator and other downstream components from contacting the liquid being withdrawn from the patient. The protective device has an inlet and an outlet and an actuator mechanism that can move between a contracted position where a gas can communicate through the protective device between the inlet and the outlet and an expanded position where the actuator mechanism occludes both the inlet and the outlet to shut off the vacuum supply to the patient. An electrical circuit having a pair of sensing electrodes provides an electrical discharge to trigger a shape-metal alloy wire to move the actuator mechanism from the contracted position to the expanded position when the sensing electrodes detect the presence of a liquid therebetween.